

High Capacity



RAPID500

The medium scale, RAPID1000 incinerator is the latest innovative design from Addfield joining our High Capacity incineration range. Suitable for the disposal of most animal carcass waste streams.



The Rapid™ range of incinerators are the ideal solution for batch load disposal of waste. This innovative system allows the operator to load large carcasses via the access door. This compact design allows fast deployment of a static or mobile version with a burn rate of up to 1100 lbs/hr direct to the waste source, helping control site bio-security. The Addfield Rapid500 is one of the most robust, reliable and thermally efficient, large scale incinerators on the market. As with all Addfield equipment the RAPID500 has been designed using Computational Fluid Dynamics software. All Addfield machines have the same basic design principles have been applied to build the most reliable system available.

Machine Specification

External Length (in)	200.78
External Width (in)	90.55
External Height (in)	89.37
Internal Length (in)	87.87
Internal Width (in)	59.84
Internal Height (in)	56.69
Chamber Volume (ft ³)	176.5
Weight (Approx.Tonnes)	24.1
Max Load Capacity (lbs)	4400
Nominal Burn Rate UK* (lbs/hr)	<1100
Burn Rate [Export Only]* (lbs/hr)	1100
Thermal Capacity (kW)	1200
Power Supply 50/60 hz	210/230v
Diesel	Yes
LPG	Yes
N-Gas	Yes

*We reserve the right to change the specification, dimensions and quality of materials from time to time, so long as the alteration is minor or an improvement to the said product.

Primary Chamber

- Fully insulated internal refractory lining, constructed from high grade refractory brick ensuring a self-supporting, interlocked arrangement.
- Fully interlocked, manually operated, access door.
- Waste ignition burner, temperature controlled on-off, complete with internal air fans.
- Hot hearth combustion burner, temperature controlled on-off, complete with internal air fans.
- Secondary combustion burner air fans with automatically controlled distribution to their designated area.
- Two temperature sensor mounting points.

Secondary Chamber

- Fully insulated internal refractory lining, constructed from high grade refractory brick and low thermal mass insulation.
- Secondary chamber burnout burner, temperature controlled on-off, complete with internal air fans.
- Integrated combustion burner air fans with automatically controlled distribution to their designated area.
- All combustion fuel pipe work.
- All electrical components.
- One temperature sensor mounting point at the base of the exit flue ensuring the chamber reaches the necessary 1562°F minimum.

Expected Emissions*

Expected Emissions*	% By Volume
Carbon Dioxide (CO ₂)	5%
Water (H ₂ O)	29%
Oxygen (O ₂)	6%
Nitrogen (N ₂)	54%
Smoke (Not detectable under standard operating conditions)	0%
Odour (Not detectable under standard operating conditions)	0%
Volume of Ash (Dependant on waste streams)	1-3%

*These emissions are based on minimum waste calorific values 20.7MJ/lbs (animal carcass). With no other waste streams present, other than general packaging containers that do not make up more than 1.5% of the total load weight.

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Waste Loading and De-Ashing

Loading can be carried out either mechanically or manually through the vertical opening hydraulically operated lid. The ash removal will be manually through the front ash doors, a full set of de-ashing tools are included with every Rapid machine. To de-ash simply push the de-ashing button on the control panel, this will isolate the lower burners to allow ash doors to open for ash removal.

The Addfield Difference

- Pre-fabricated 0.3in robust mild steel casing, seam welded and suitably stiffened/ braced where necessary.
- Lightweight resilient refractory fibre insulation door, providing a tight seal, giving excellent thermal efficiency.
- Primary and secondary chamber lining thickness 7.24in, rated at 3000°F.
- Low thermal mass roof lining, with removable roof and back plate for ease of maintenance.
- Paint finishing – The steel structures are completely painted using a two-pack high grade paint system.
- Unique Grated Hearth technology designed for the increased efficiency of material incineration.
- With a 7.24in thick refractory lining, using andalusite and insulation bricks, improving thermal efficiency.



Machine Specification	Unit Measurement
Burners (x4)	12 00kW
Burn Rate	1100lbs/hr
Andalusite Brick	4.5in
Fibre Board	2in
Pyrogel TX	0.7in
Steel Construction	0.3in
Refractory Thickness	7.25in
Chimney Insulation	3.93in
Ash Content	5%
Load Aperture	31.29in x 120.86in
De-ashing Tools & Box	Included
Control Panel	PLC Controller
Noise Level	76-78dB/A
Venturi System	Optional
Bin Tipper System	Optional
Hydraulic Loader	Optional